THERE IS CLAIMED:

1. An attitude control system for a geostationary satellite including elongate members such as solar generators and/or antennas, in particular deployable members, which system includes gyroscopic actuators for supplying the torque necessary for maintaining the attitude of said satellite when subjected to disturbing forces or torques.
2. The system claimed in claim 1 wherein said gyroscopic actuators are adapted to maintain a setpoint attitude during orbit correction phases.
3. The system claimed in claim 2 wherein said gyroscopic actuators are adapted to control the attitude during a phase of insertion into a geostationary orbit.
4. The system claimed in claim 1, further including an attitude regulation loop including a corrector such that the bandwidth of said loop contains the lowest and most energetic frequencies of the flexible modes of said elongate members.
5. The system claimed in claim 4 wherein said corrector of said loop is of the proportional, integral, derivative type and is associated with an attenuation filter.
6. The system claimed in claim 4 wherein said corrector of said loop is synthesized by means of advanced system control methods such as the $H\infty$ and Linear Matrix Inequality methods.